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Picture on the front cover from ByBo's housing project «Løvåshagen». Photo: Knut Egil Wang

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COMPETING REQUIREMENTS WHEN PLANNING KINDERGARTENS; LANDSCAPE ARCHITECTS' VIEW

ASKILD H NILSEN AND INGER LISE SAGLIE

Abstract

This study examines how landscape architects experience tensions regarding legal confinements, their role in the planning process and their views on their own contribution when planning new kindergartens in Norway. The material was retrieved using a web-based questionnaire sent to all practicing landscape architects in Norway.

This study finds the landscape architects to be child-centred and motivated to perform planning and building management according to «best practice» on behalf of children. Despite this base and support from a law concerning kindergarten, the actual results at kindergartens are focused less on designated space for play and child-centred philosophies than on trivial functional requirements like parking and universal design. The reason for this is that some functions in kindergarten planning are required by law and strict guidelines, while outdoor play areas are not protected in the same way but are merely planned by solicitation.

Key words:
Landscape architect's role, New Public Management, planning, structural quality

Introduction

When planning establishments like kindergartens, all involved planners are expected to be up to date on current regulations and to have a clear understanding of roles and a joint understanding of what the project should achieve (Healey, 1992). This is a description of an ideal project situation, but unfortunately this is not always the case, especially when the end users are kept from participating in or contributing to the planning process. An example of such an end user is children, usually passively planned for and rarely actively included in decisive choices. This situation also blurs the distinction between the moral (children) and practical commissioner (local administration) (Paget, 2008). In cases of unclear objectives and vague role distribution, tensions can occur within the design team with the likely result of not living up to expectations.

A function like parking is clearly regulated and protected in the requirements for the design of outdoor areas, while outdoor play areas do not benefit from clear demands. When further using the term «play area» we describe all available outdoor space available for children.

If this difference is perceived to be contrary to the values of the involved planners, it can cause frustration and dissatisfaction. The outdoor areas of public kindergartens[1] in Norway are almost always designed by landscape architects. Research has shown that landscape architects take on a greater societal mandate for their professional practice. This has been described as working for a better society or defending the public good, including «green interests» and public space with a holistic approach (Brown & Jennings, 2003; Goelman et al., 2006; Grange, 2005; Imbert, 2007; Jeffrey & Woods, 2003; Paget, 2008; Sager, 2009; Swaffield, 2002). Such values as a basis for landscape architecture practice may well influence how landscape architects perceive how outdoor spaces for children ought to be. The scope of action resulting from the deregulation of strict guidelines for outdoor areas for play may well conflict with the basic values on which practitioners base their work. This may create tensions in how the professional planning role is played out. One example of a possible cause of tension is the removal in 2006 of the Norwegian strict guideline, a norm requiring an outdoor play area of 24 m^2 per child at kindergartens, resulting in a significant decrease in the size of play area per child after that year (Nilsen & Hägerhäll, 2012). To avoid confusion by using the term «norm» both as a strict guideline as understood in physical planning, and «norm» as ethical reasoning as understood in social psychology, we further use «norm» only when meaning ethical reasoning. This value question of weakening children's rights may also result in another unresolved aspect: Who are landscape architects designing for? Is the commissioner of the work seen as the most important to design for, or is it the children? Paget (2008) described this as a tension between the moral commissioner of work and the economic commissioner, the client actually paying for the work. This is another dimension of the ten-

1 In Norway, the word «kindergarten» describes a pedagogic service for children from 1 to 5 years of age and is therefore used here. The word «preschool» describe a pedagogic service from 3–5 years, while «nursery school» and «day care centre» define a service from 1–3.

sion in the *realpolitik* of ordinary daily practice and the highly held values underpinning landscape architecture practice.

Another variety of this tension can be observed in the design process. Who has access to the arena when decisions are made? The landscape architect may have high ideals for user involvement in the process, but in the *realpolitik* of the actual design process these may be excluded. This situation has been discussed and formulated as «Torn between Dialogical Ideals and Neo-liberal Realities» or «Communicative Planning versus New Public Management» (Sager, 2009, p. 65). The landscape architect is usually a part of a larger team of design professionals, and can often feel that his/her role is to defend children's opportunities and play area qualities in terms of outdoor spaces, due to children's weakened right to play area space.

So, how do these possible tensions apply to landscape architects when planning kindergartens? The first aim of this article is to establish the practitioner's view on the potentially conflicting space requirement when planning outdoor spaces at kindergartens. We ask:

- How do landscape architects see and rate the role of strict guidelines and regulations concerning the planning of outdoor space at kindergartens? Which aims and requirements for outdoor spaces are perceived as «winners» and «losers»?

The second aim of the article is to describe whether or how the tensions relating to highly held values are perceived by the landscape architects. We ask:

- Who are seen as commissioners of the landscape architects' work?
- How do Norwegian landscape architects see their role in the planning group when planning kindergartens?

If strict guidelines do not support the landscape architect in the work for the moral commissioner, the children, tensions are more likely to occur. We ask:

- How much space is needed in the outdoor play area per child in the kindergartens?

History of kindergartens

Kindergarten as we know it today emerged from orphanages and the need to make it possible for single mothers to work. The evolvement of kindergarten in Norway is closely linked with women's entry into the labour market. With more children staying longer in day care, the need for qualified and educated caretakers was acknowledged. From 1950, kindergartens were naturally included when planning new neighbourhoods in Oslo (Rolfsen, 1960). The need for kindergartens increased during the 70s and was clearly politically driven from the 80s (Blom, 2004).

Through the 90s and into the 2000s, kindergarten has become more and more perceived as preparation for school (Gulbrandsen et al., 2002). Therefore, kindergarten was given a clear educational role. This was particularly evident in 2006 when a reformation of the educational system in Norway was implemented, changing the age for starting school from seven to six years. Today, parents have a statutory right to stay at home for 12 months with paid leave with their child. This means there is a current need for five years of kindergarten in Norway. In other words, most children today spend a considerable amount of time each day at kindergarten, putting high pressure on the facilities and outdoor play area.

Research has found that play, especially outdoor play, benefits children's development. Outdoor play allows children to have vigorous, chaotic and free play with running, climbing and chasing, but also offers the possibility for more quiet fantasy play (Granberg, 2004). This in turn teaches children social interaction as well as how to succeed in sustaining friendships, work together, and lead and follow. Free play may also improve several aspects of emotional wellbeing such as minimizing anxiety, depression, aggression and sleep problems (Burdette & Whitaker, 2005). An environment preventing multiple motor experiences can lead to physicological immaturity, retarded growth and weight gain (Sandborgh, 1982). In other words, there are good arguments for including outdoor play area at kindergartens.

The development of requirements for outdoor spaces at Norwegian kindergartens

Specific requirements for the content of and outdoor play areas at kindergartens have not been stated or clearly listed in Norway. In 1954 the provision for the Child Welfare Act recommended that the outdoor play area be sunny, and in 1977 and 1982 the size of play area per child was stated in strict guidelines (Blom, 2004; MCAA, 1977; MCAA , 1982).

The current Kindergarten Act no. 64, Section 2 is not very precise, stating only that «Kindergartens shall provide children with opportunities for play, self-expression and meaningful experiences and activities in safe, yet challenging surroundings» (MER, 2005). Landscape architects are not obligated to apply definite requirements to outdoor play areas for children. More precise requirements are not found in the corresponding provisions of acts, white papers and national guidelines (MCFA, 2005; MER , 2005; MER, 2006; MER, 2009).

Planning kindergartens and their designated outdoor areas is demanding, requiring responsible and safe spaces and solutions according to specified requirements. However, many practical considerations concerning space must be solved, such as outdoor play area, access, parking and waste disposal, requirements that often compete for space. When

landscape architects are invited to design the outdoor spaces at kindergartens, the available gross size of properties, the building footprint and the strict guidelines for parking are often already fixed, while there are no longer strict guidelines for minimum outdoor play spaces (Nilsen & Hägerhäll, 2012). Many of the requirements that currently apply to outdoor areas are general to all public grounds, or have a special focus on children's safety concerning playground equipment (MCFA, 2005).

The outdoor area at kindergartens can be regarded as a product of the interplay between strict guidelines and laws, proprietor, architect, landscape architect and other individuals involved in the planning process, and since 2005 the landscape architect has been an expected team member when planning and managing the building of new public kindergartens in Oslo.

Scope of action for landscape architects

Landscape architecture is recognized as a separate profession, but the plans of related professions are often included in the drawings to better coordinate the planning of outdoor subjects. The landscape architect often takes on the role of coordinating other professions, to ensure that different elements do not conflict. One example of this is coordinating the location of elements designed by other consultants responsible for water, sewer, electricity supply and statics; in other words, coordinating aspects like the location of ditches for water drainage, the location of cable trenches and the design and height of retaining walls. One could argue that this is normal and expected cooperation between various disciplines, but it is often perceived by the landscape architect as a greater responsibility to have full control of all parts of the outdoor space and the plot in general. This is not a duty requested in the project manual or contract, but rather a liability taken on by the landscape architect. The nature of landscape architecture is a discipline that «encapsulates» all the other contributors to a project, and therefore the landscape architect naturally acts accordingly. This experience is described in the work of Susan Paget (2008, p. 129), expressed by one of her landscape architect informants:

> *You take on different roles, but if I had to describe the biggest difference, it must be to take responsibility for the totality, for the outdoor environments that are created, to have so to say «an eye» whilst firmly grounded.* (Cecilia)

Within highly regulated societies such as Norway, there are a number of laws, regulations and strict guidelines that shape the landscape architect's scope of action. In her doctoral thesis, Susan Paget discussed how landscape architects saw themselves when planning school grounds (Paget, 2008). She found that they to a high degree felt that their profes-

sional practice was determined by social structures through economy and institutional framework.

These strict guidelines and requirements reflect values and ideas more generally in society. While Norway and other Nordic countries have been characterized by a strong public sector, there has been a clear change towards neo-liberal influence. This includes a stronger role for market-oriented solutions and less state intervention (Thorsen & Lie, 2007). Of particular interest here is the stronger role of private actors in securing publicly subsidized service. Kindergarten is a sector where there are a number of private actors building and running kindergartens. There has also been a significant change towards a deregulation of space requirements for outdoor spaces. While there used to be a clear national guideline concerning the size of the outdoor spaces, it is now up to the owner of a kindergarten to assess the suitability of the size. This is a change from public requirements to private assessment by service providers.

A number of authors have pointed to the importance of norms in conducting a professional activity (Healey, 1992; Sager, 2009; Schön, 1983). When deciding on a particular action in a specific context, the practitioner has to judge whether one certain action is better than another. This situated, practical judgement incorporates a combination of forms of reasoning. Habermas (1984) has divided this reasoning into three spheres: rational thinking, aesthetic reasoning and moral/practical judgement. A skilled practitioner has the ability to combine all these forms and apply them in very complex settings (Healey, 1992).

Schön (1983, p. 24) discusses three components that constitute professional knowledge as well as professional practice, based on earlier works by Edgar Stein. A professional practice is based on three elements, according to Schön (1983): first, an underlying general theory on which the practice rests; second, an applied element whereby more generalized knowledge is applied to a concrete case and the day-to-day problem solutions are derived; and third, a skills and attitude component that guides the practitioner. With regard to kindergarten, the basic theory would be how children learn and play and the way physical surroundings facilitate or constrain such activities. The applied element would incorporate how actual land can be used to provide good outdoor play areas for children. The third element includes the practitioner's personal skills as well as attitudes. As the space requirements have been restricted, there is also a component of skill in efficiency in the use of available space when designing outdoor spaces for play and necessary spaces for the daily operations of the kindergarten. The practitioner attitude is important when making actual design decisions. A skilful planner has to make decisions in complex settings including rational, aesthetic and moral reasoning necessary for judging whether a solution is good or not (Healey, 1992). An ethical reasoning would include the question: for

whom is this a good solution? This ethical reasoning reflects individual attitudes as well as underlying professional norms.

The norm or ethical reasoning underpinning professional practice can be explicitly pronounced or more tacit. A number of professions have written ethical commitments. The professional body of landscape architects in Norway, the Norwegian Association of Landscape Architects (NLA, 2011), state in their rules for ethical conduct that a high ethical standard is needed. This is specified in terms of obligations to the client and contractor; but not to society at large. The National Association of Norwegian Architects (NAL, 2011), however, have specified that architects have an obligation to secure physical structures that are beautiful and well functioning for human beings (§ 2–1 Rules of ethical conduct). Although not explicitly stated in the landscape architects' rules for professional conduct, this may well be the foundation for landscape architects as well.

The client who has hired a landscape architect is an important factor when framing the latter's scope of actions, and the relationship between these actors is addressed in the rules for ethical conduct. It is stated that the landscape architect shall use his/her knowledge and skills to ensure a good result, and serve the client's interests to the highest degree possible without breaking the rules for ethical conduct (Ethical guidelines NLA, § 3–1). This implies that there can be tensions in the general practice of landscape architects and the need to serve the client. Such tensions have been identified in other professions, e.g. planners who are strongly in favour of broad inclusionary processes in planning processes that allow all affected parties to be heard, and the need to facilitate market actors' property development processes in order to secure private investment. While the former processes are broad and inclusionary, the latter favours developers'/public authorities' closed and efficient cooperation on a development proposal (Sager, 2009).

The reduction of the size of outdoor spaces may create a tension in the landscape architects' professional practice between high ideals and the *realpolitik* of reduced requirements for public outdoor spaces. What is the situation in Norway among landscape architects? Do they experience similar discomfort due to their profession's dictated scope of action and the expectations in the planning situation or may strict guidelines for size of play area lessen the discomfort?

Method

The aim of this study was to investigate the scope of action as experienced by landscape architects in general in Norway, particularly those who had planned and been involved in the management of kindergarten building in Norway during recent decades. A questionnaire was con-

structed whereby the participants were asked about their experiences when planning kindergartens and their views on strict guidelines and laws regarding the construction of kindergartens and the application of legal restrictions.

Most working landscape architects in Norway are members of the NLA, which had 668 members in August 2011. All members were invited by e-mail in August 2011 to participate in an Internet-based survey on the planning and building of kindergartens, and a hyperlink to the survey website was included. In addition, an advertisement for the study with a link to the questionnaire was published in the monthly Norwegian architectural magazine *Arkitektnytt (2011)*.

As 37 members were on leave from their job (automatic reply from e-mail account), 631 members were eligible for participation in this study. In total, 230 landscape architects volunteered to participate, which gave a response rate of 36.5 %.

The survey focused on how landscape architects related to current laws, common rules and strict guidelines while planning for children. In addition, we asked questions related to the landscape architects' anticipated role in the planning group, current laws, common rules and guidelines framing the scope of action while planning for children. The survey defined the word «requirements» as covering all current laws, common rules and strict guidelines regarding the topics brought up for investigation. When asking about which variables influence the planning, we presented the participants with the following variables: parking, waste handling, noise barriers, visibility, universal design, fire safety, and radiation shielding. When asking about the experienced interaction with planning groups and others involved, we presented the participants with the following variables: end users, employers, self, project groups.

The participants were asked about demographic variables (age, gender, county of residence and work), length of work experience, number of kindergartens planned, and their own view of applied strict guidelines and laws and interactions with colleagues and employers. The questions discussed in this paper are presented in the appendix.

The three first research questions were responded by experienced landscape architects only, while the last research question has included the response from all responding landscape architects.

Characteristics of the respondents

Of the 230 landscape architects who participated, 29.6 % were men and 70.4 % were women. This is close to the gender distribution of all members of the association (28.4% men and 71.6 % women). The majority of

the respondents (66.5 %; n = 153) were aged 25 to 45 years. Only two respondents were over 67 years of age, which is the normal age of retirement in Norway. About half of the respondents (48.6 %) were living in the greater Oslo area (Oslo and Akershus county), which has a total population of about 1.1 million (slightly more than a fifth of the total population of Norway) and is the most densely populated area in the country. More than half of the participants (57 %) had work experience from Oslo.

Due to the great migration to the big cities in recent years, the majority of new kindergartens have been built in the country's central areas. Landscape architects are usually hired to participate in the planning of public kindergartens. Those with work experience from the bigger cities are more likely to experience the tension between different use requirements and the need of space, and thus may want to participate in a survey of this kind, with the prospect of helping to offer a better understanding of the planning situation.

About 56 % of the participants had more than 13 years of experience, and 90 % had more than six years of project planning experience. With such experienced landscape architects responding, one can conclude that the results are reliable. Of the 230 respondents, 60.9 % (n = 140) had planned a kindergarten. Of these, 75.0 % (n = 105) had planned a kindergarten between 2007 and 2010, so their experience is quite recent.

To find answers to the research question presented in the introduction, we decided to formulate the questions as listed in the appendix. We used Pearson's Chi-Square 2-tailed test for the statistical evaluation of results, using PASW statistical software version 17.0 (IBM Corp., Armonk NY, USA).

Results and discussion

Which requirements for space win or lose in the competition for space?
As described earlier, there are a number of requirements that the outdoor spaces have to fulfil in order to be good play areas for children as well as serve more specific purposes, including waste handling, parking spaces, protection from noise, pollution etc.

When asking about which requirements were most important in the design process, the landscape architects answered that play area was the most important. Sixty per cent answered that this was very important. It is not surprising to find that play area was seen as the most important among the various functions the outdoor areas are supposed to fill, given the weight play has been given at kindergartens; more surprising is perhaps that it was not rated higher. This might be interpreted as a view of practice whereby play area has to compete for space in relation to other purposes. And this was clearly the case when the participants were asked directly whether play areas are on the losing end, compared to other variables in need for space.

Parking and universal design are the elements that are experienced as being prioritized at the expense of play area; in other words, they are better protected by law than play area is. Of all respondents, 59.3 % had experienced that requirements concerning parking were prioritized «often» or «very often» at the expense of the size of the play area, while universal design in this sense was less important, with only 35.7 % (see figures 1 and 2). Other variables (waste handling, noise barriers, visibility, universal design, fire safety and radiation shielding) were predominantly experienced as occurring «seldom» or «never». The least invasive variable was radiation shielding. It is clear that the landscape architects experience that other purposes «win» compared to children's need for play areas.

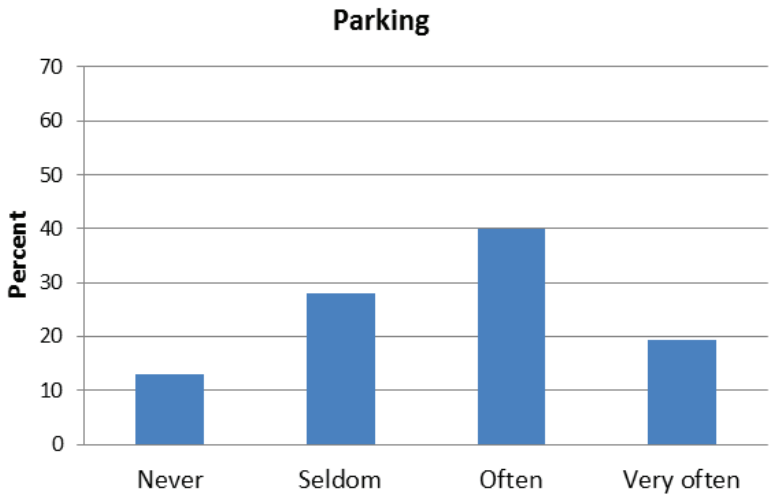


Figure 1. Have you ever experienced that parking comes at the expense of the *size* of the play area?

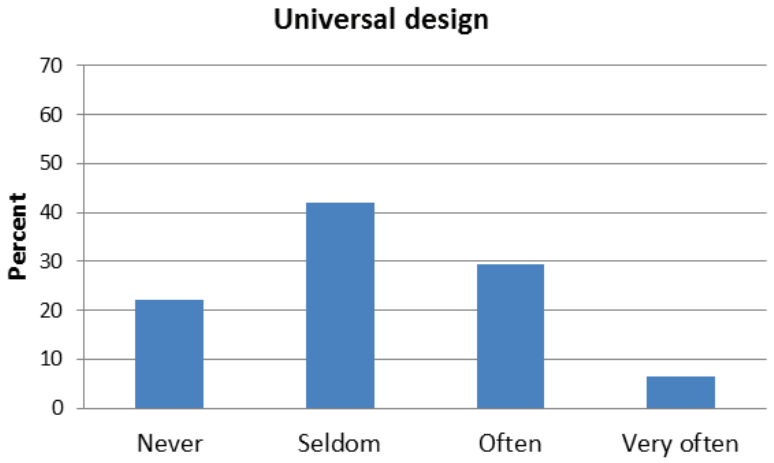


Figure 2. Have you ever experienced that universal design comes at the expense of the *size* of the play area?

Parking and universal design have specific and detailed requirements concerning how to design; deviating from these requirements is usually not possible. The inflexibility of the requirements in parking as well as in universal design may occupy not only space or the available size of the area, but also the functionality of the play area. This can be explained by the nature of outdoor space in Norway, which in most cases is not level, requiring long access ramps in many projects. The specific and detailed requirements for designing roads and ramps are not easy to apply to make good play areas.

Parking is experienced as influencing the *functionality* of play areas either «very often» or «often» in 43.6 % of the cases. Of the other tested variables, only universal design is experienced as «very often» or «often» coming at the expense of functionality in 35.7 % of the cases (see figures 3 and 4). Other variables (waste handling, noise barriers, visibility, fire safety and radiation shielding) seemed to have little protruding effect on the functionality of the play area.

It was not surprising to find that parking is experienced as problematic, regarding both functionality and size, to fit in limited spaces given the inflexible demands for, e.g., turning a car around. However, we did not expect universal design to be experienced as imposing negative challenges in the planning of kindergartens regarding the *functionality* of the play area.

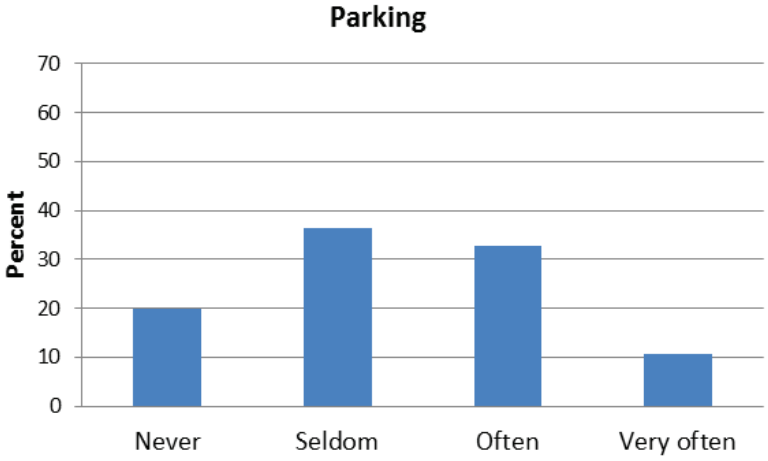


Figure 3. Have you ever found that parking comes at the expense of the *functionality* of the play area?

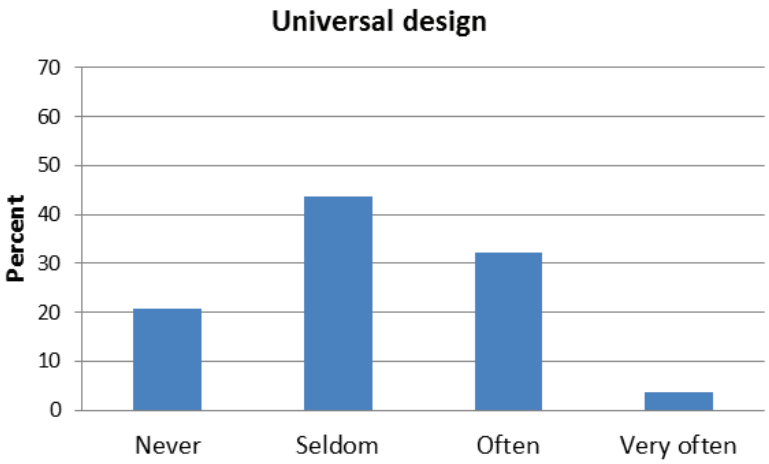


Figure 4. Have you ever found that universal design comes at the expense of the *functionality* of the play area?

The experience that parking comes at the expense of the *size* of the play area is apparently not only an urban phenomenon. In fact, the respondent's claim it occurs more «very often» and «often» outside Oslo and Akershus (see figure 5). It is reasonable to expect this balancing act to be most difficult when there are limited available land resources, as is the case in the urban areas of Oslo and Akershus. On the contrary, parking is experienced as most problematic in areas outside the most populated area of the country. This does not imply rural areas solely, as there are other large cities like Bergen and Trondheim, but one explanation could be that local strict guidelines for parking are treated more strictly in rural areas since possibly more staff as well as parents drives to the kindergarten. We therefore recognize our material's limitation in only comparing larger regions (counties), which did not allow us to contrast urban cities with rural areas; we point instead to an interesting trend to be further investigated.

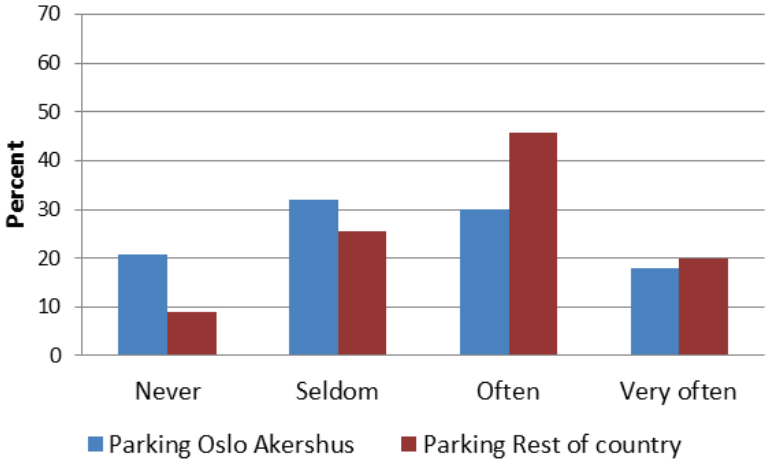


Figure 5. Parking at the expense of size in the play area.

Another way of solving the tensions between competing space requirements is to depart from the strict guideline or ask for dispensations. Although the guideline of a 24 m² play area per child has been abolished, knowledge of the former guideline prevails among landscape architects. Thus, it is also possible to ask whether the play area «guideline» was departed from.

It was especially interesting to find that play area departed «very often» as experienced by 10.0 % of the respondents, while parking was experienced to deviate from requirements «very often» in only 1.4 %. When the responses «very often» and «often» were added, the result was 38.6 % for play area and 20.0 % for parking. Thus, parking stands out as more «resistant» to formal deviation from requirements in the design of kindergartens.

All other variables are less important when it comes to filing for dispensation, but this follows the respondents' previous feedback that these variables are less likely to come at the expense of the size or functionality of the play area. It is more serious that, when dispensation is filed for, the «loser» is most often the play area. Again, we can conclude that requirements for parking are stronger than the need for play area (see figure 6).

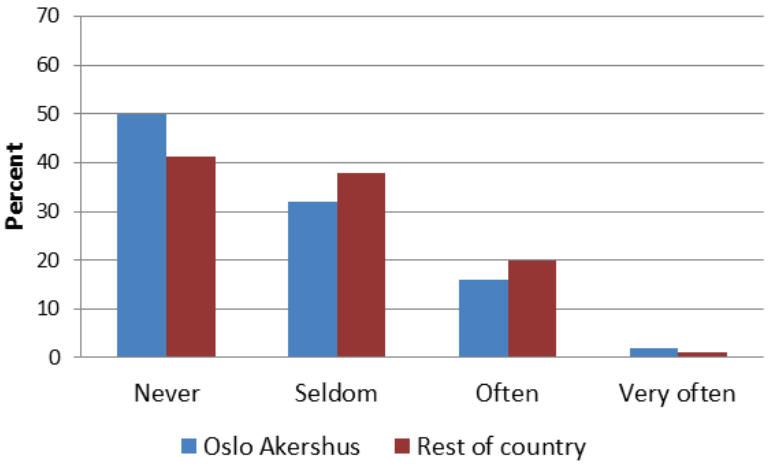


Figure 6. How often are requirements for parking not fulfilled?

Who are seen as the commissioners of the landscape architects' work?

It is quite clear that play area is the «loser» in the competition for space, as is also shown in a study of built kindergartens on the outskirts of Oslo (Nilsen & Hägerhäll, 2012). How do landscape architects perceive this? Who do they consider their employer to be? Is it first and foremost the economic employer or the end user/children that counts? When the answer «very important» is compared, the survey shows a clear difference among the various groups they design for. From the survey it is quite clear that the landscape architects have their focus on the end users, as 83 % answered that they are «very important». The landscape architects place their employers' expectations second, with 34 % choosing «very important» for this option. Their own expectations are «less important», coming third, with 26 % claiming this to be «very important». The «least important» were their peers in the project group (16 %) and current trends (5 %).

When the answers «important» and «very important» are combined the scores are more even, but the order is the same. The end user has a slightly higher number (99.3 %), followed by the employer (98 %), the landscape architects' own expectations (85 %), and expectations from peers in the project group (82 %) and finally current trends (34 %). Thus, the commissioner – both the moral (children) and the actual one – is the most important to satisfy.

How do landscape architects see their role in the planning group when planning kindergartens?

The most important arena to be heard for the landscape architect is in the project group. «Very important» was reported by 22.9 % of the respondents, and when «important» is added the result is 94.3 %. Since children are not brought in to contribute to the planning process, «end user» in this case refers to the future manager of the planned kindergarten, who often participates in the planning. So end users are also important, with again 22.9 % choosing «very important», which together with «important» gives 92.8 %.

It is interesting to realize that the least attentive party, according to the landscape architects, is their employers. Their opinions are applied «very often» (22.9 %), while 61.4 % claimed that this happens «often», a total of 88.6 %. More grave was to find that 11.4 % claimed they are «rarely» heard by their employers.

We asked the respondents about their possibility to plan according to the «Children's Act» and the requirements stated for outdoor play area. This question was only presented to respondents with experience in planning kindergartens, and presumed pre-knowledge. The majority re-

sponded «very often» (30.7 %) and «sometimes» (53.6 %). This might be interpreted as the landscape architects acknowledging that the experienced scope of action has room for improvements when planning according to the Children's Act?

How much space is needed in the outdoor play area per child in the kindergartens?

The landscape architects are most concerned for the end users of their design, in this case the children (60 % rated children to be most important). They also report that there are requirements that come at the expense of the play area, particularly parking and universal design. This may lead to dissatisfaction with the results. We posed a question about the outdoor play area size they consider to be sufficient per child in a kindergarten; Figure 7 shows that there is clear top around 25–30 m^2 per child, which is slightly above the former strict guideline of 24 m^2. There might well be tensions between what ought to be and how spacious the play area actually is. We have no nationwide statistics on this, but the investigation in outer parts of the Oslo municipality shows that after 2006 play areas in the outer city were over 24 m^2 per child in 49 % of the cases, but that the number of kindergartens with more than 24 m^2 per child had declined significantly after 2006 (Nilsen & Hägerhäll, 2012).

We asked if a requirement regarding size of space in the outdoor play area at a kindergarten was to be a maximum or a minimum requirement, and received an overwhelming response. A total of 96.1 % of the respondents want a strict guideline stating a minimum requirement for the size of outdoor play area. The entire landscape architect profession is virtually in unison about this. Only 3.9 % want a maximum requirement regarding size of space. Note that this question was answered by experienced and non-experienced landscape architects.

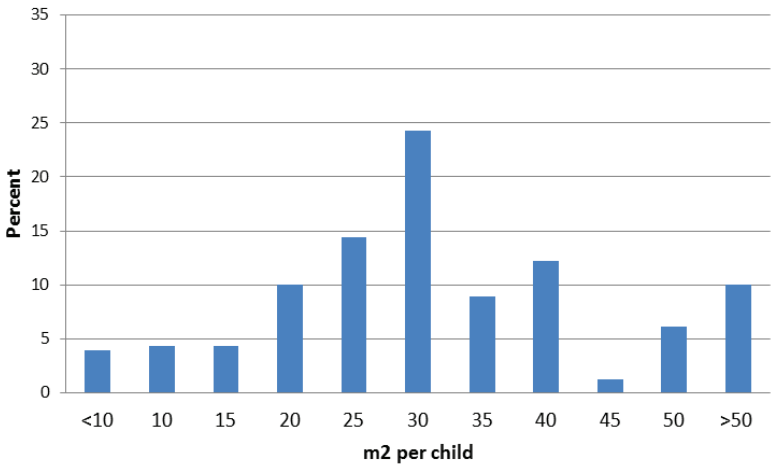


Figure 7. How much space is needed per child in the outdoor play area? All respondents (n = 230)

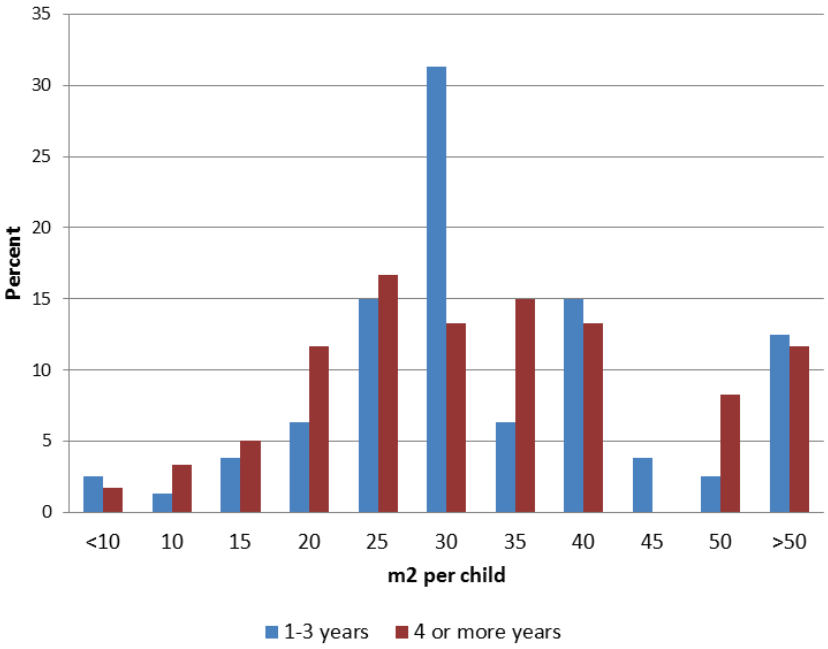
For experienced landscape architects, this attitude might be interpreted as mistrust and a result of experiences of unfortunate processes and the built result when such a strict guideline is not present. However, we find that nearly the whole profession agrees on this, independent of experience, and this fact stress why landscape architects may see themselves as protectors of the moral commissioner, the children.

Other factors that may nuance perception

What about skills and experience? Do all landscape architects respond equally to the question of space needed per child? By sorting out respondents having planned one to three kindergartens, we found that respondents chose 25–30 m² per child in 46.3 % of the cases. Respondents having planned four or more kindergartens are more divided in their view. This may be interpreted as better skills giving a more nuanced attitude towards space distribution, and more openness to the harsh reality. A highly experienced planner may be able to solve more within a limited space compared to a colleague with fewer skills.

The Kindergarten Act is important in general, but has somewhat vague formulations describing outdoor play areas (MER, 2006). Due to the importance of the act, we asked all respondents about their familiarity with the requirements for functions in the outdoor play area at a kindergarten as described in the Kindergarten Act. We compared responses with the years of experience, and found that respondents with more than 13 years of experience claimed to have the most knowledge, with 2.5 % answering «very good», 39.2 % «good» and 43.0 % «some». Looking at all

Figure 8. How much space is needed per child in the outdoor play area? Responders with one to three years' or more experience (n = 140).



respondents together, the majority (43.0 %) claimed to have «some» knowledge. Only 1.7 % responded «very good», while 33.5 % reported having «no» knowledge. We conclude that there is a general link between years of experience and confidence in one's own knowledge.

So where do our respondents get their skills? The most important arena for educating oneself and getting a better comprehension of current laws and common rules is said to be one's own experience, with a response of «very important» in 50.0 % of the cases. With «important» added, there was a 95.2 % response. Colleagues were «very important» to 40.9 % of the respondents, and with «important» added the result was 89.2 %. Courses and conferences in one's field amounted to 62.2 % when the two options «very important» and «important» were combined. Debates on social affairs were the least important factor, and were «very important» as a source of information for only 3.0 %. With «important» added, the result was 38.2 %. Educational establishment was claimed to be «very important» to 17.0 %, and the addition of «important» yielded a response of 55.3 %.

Norway is a long country, where landscape architects are spread over large distances. The planning and design of kindergartens have not had designated conferences or been given special attention in the planning debate, at least not since 1995, as confirmed by the manager of the NLA in February 2013. It is therefore understandable that most knowledge is acquired through personal experience and from close associates. This situation puts the responsibility to update oneself on current laws on each planner, while the profession in general is not up to date.

In Norway there are more female than male landscape architects (28.4 % men and 71.6 % women). We tested all responses discussed in this article for differences according to gender, and found only two variations that were statistically significant (A p-value less than 0.05 shows statistically significant differences between the genders).

Firstly, we found that women regard the requirements for parking as more important than men do: women 84.5 % and men 67.4 % ($p = 0.02$). One possible way to interpret this is perhaps that men see the requirements for parking more pragmatically. Secondly, there was a significant difference in the perception of size needed per child ($p = 0.05$): 66.7 % of the women wanted every child to have 30 m^2 or more, while only 52.9 % of the men were of the same opinion.

Conclusion

There are clearly conflicting space requirements in the planning of outdoor spaces at kindergartens, in the view of practicing landscape architects. While one could expect that spaces for children's play are given high priority when designing areas particularly designated for children, the landscape architects experience that this is not the case. In their view, parking and universal design are «winning» at the expense of play area. This can be explained by the technical and inflexible character of the size and layout of these space requirements. This is an example of how good intentions may collide, and the requirements specified in law and regulations are «winning».

In this article we have also investigated the landscape architects' view of their professional role and the tensions that may arise between underlying professional norms and the daily situation of designing for a commissioner within defined frames and as member of a project group. Landscape architects have a clear social commitment, with a clear prioritization of end users (in this case the children), and do acknowledge that children's play areas are losing the battle over outdoor space. Likewise, the profession is expressing a clear need for a quantitative standard for the size per child in the outdoor play area to prevent further subversion of possibilities for outdoor play. The wide spread in response to what size per child is suitable indicates that the need for a firm strict guideline with a stated number is imperative for the profession.

Different functions, all acknowledged as necessary, are competing over the same available space, which often leads to situations in which, for instance, universal design is seen to hinder better functionality or size of space at the expense of outdoor play area.

The landscape architects' prospects to design successfully according to their own expectations seem to be dependent on an approving design team and on whether the function is demanded by law.

We find a certain effect of the skill component, as we find that experience may provide a pragmatic approach and the ability to design more compactly, as experienced landscape architects accept more compact spaces or less space per child.

Landscape architects are little concerned about trends in the discipline. Could the reason for this be that planning for children has little prestige and rarely makes headlines in the major design magazines?

Norwegian landscape architects are less concerned with academic peers' review than those in the Swedish study by Susan Paget. Generally, we found few gender differences in the results; statistic testing revealed only two significant differences of opinion between men and women.

One explanation for this may be the education of landscape architects in Norway, which until recently was only offered at one institution, the Norwegian University of Life Sciences UMB, and thus instilled the whole field with the same values. Similarly, work for landscape architects has largely been limited to the larger towns and cities in our relatively small country, thus giving the majority of the profession similar work experience.

The survey clearly shows that the landscape architects perceive that functions well protected by regulations, such as requirements for parking and universal design, often come at the expense of play area, which on the contrary has lost its strict guideline.

This shows that the design of the outdoor facilities cannot be left to individual choice or desire. Even landscape architects with a clear agenda of the best possible design for children will often fail to succeed if their intentions are not supported by regulations or law. When we confronted landscape architects directly regarding whether a minimum standard of size in play area per child is necessary, the unison response was that such a strict guideline should be immediately reintroduced. If this is not done, we expect a situation in which use of space protected and regulated by law and strict guidelines wins the battle over unprotected space, in this case the outdoor play area at public kindergartens.

Acknowledgement

Thanks to Professor Caroline Hägerhäll (SLU) and Professor Anne-Karine Halvorsen Thoren (UMB) for valuable discussions. The research is part of an ongoing PhD work at Norwegian University of Life Sciences.

List of illustrations

1. Various figures 1–8

2. 2 photographs of authors

Appendix

Questions discussed in this paper

Questions addressed only to respondents experienced in kindergarten planning:

Questions about handling different aims and requirements in a situation when there are no strict guidelines for the size of play area:

a) Have you ever experienced that «requirements» come at the expense of the size of the play area?
Parking; Waste handling; Noise barriers; Visibility; Universal design; Fire safety; Radiation shielding (Options: Very often/Sometimes/Rarely/Never)

b) Have you ever found that «requirements» come at the expense of the functionality of the play area?
Parking; Waste handling; Noise barriers; Visibility; Universal design; Fire safety; Radiation shielding (Options: Very often/Sometimes/Rarely/Never)

c) If the size of the building site was limited, how often were the «requirements» departed from or dispensation filed for?
Play area; Parking; Waste handling; Noise barriers; Visibility; Universal design; Fire safety; Radiation shielding (Options: Very often/Sometimes/Rarely/Never)

Questions about results in relation to the needs of children:

d) When planning a kindergarten, of what importance is it to you that the results meet…?
end users' expectations; employers' expectations; your own expectations; project groups' expectations; current trends in your field (Options: Very important/Important/Less important/Not important)

e) When planning a kindergarten, how often do you consider that your opinion is applied by…?
end users' expectations; employers' expectations; your own expectations; project groups' expectations (Options: Very often/Often/Rarely/Never)

f) How often did you have the scope of action to plan according to the «Children's Act» and the requirements stated for outdoor play area? (Options: Very often/Sometimes/Rarely/Never)

Questions about the resulting quality of the outdoor areas for children's play compared to the architects own expectations:

Questions addressed to all landscape architects with or without experience in kindergarten planning:

g) In your opinion, how much space is needed per child in the outdoor play area at a kindergarten to properly meet all «requirements» for function?
Choose an alternative: <10 10 15 20 25 30 35 40 45 50 >50

h) Should the «requirements» regarding size of space in the outdoor play area in a kindergarten be...?
• a maximum requirement
• a minimum requirement

i) How familiar are you with the requirements for functions in the outdoor play area at a kindergarten as described in the Kindergarten Act? (Options: Very good/Good/Some/No knowledge)

j) Where have you formed your comprehension of current laws and common rules? (Multiple choices possible)
Educational establishment; Debates on social affairs; Courses and conferences in your field; Colleagues; Your own experience. (Options: Very important/Important/Less important/Not important)

Literature

Arkitektnytt, 2011. 7, p 4.

Blom, K., 2004. *Norsk barndom gjennom 150 år, En innføring (Norwegian childhood through 150 years, An Introduction)*. Bergen: Fagbokforlaget.

Brown, K. D. & Jennings, T., 2003. Social Consciousness in Landscape Architecture Education: Toward a Conceptual Framework. *Landscape Journal*, 22 (2), pp. 99–112.

Burdette, H. L. & Whitaker, R. C., 2005. Resurrecting Free play in young children. *Archives of Pediatrics and Adolescent Medicine*, 159: pp. 46–50.

Goelman, H., Forer, B., Kershaw, P., Doherty, G., Lero, D. & LaGrange, A., 2006. Towards a predictive model of quality in Canadian child care centers. *Early Childhood Research Quarterly*, 21 (3), pp. 280–295.

Granberg, A., 2004. *Små barns lek – en livsnödvändighet (Small children's play-a vital necessity)*. Stockholm: Lieber.

Grange, K., 2005. *Arkitekterna och byggbranschen: om vikten av att upprätta ett kollektivt självförtroende (The architects and the construction industry: the need to establish a collective confidence)*. Gothenburg: Chalmers tekniska högskola. Sektionen för Arkitektur

Gulbrandsen, L., Johansson, J.-E. & Dyblie Nilsen, R., 2002. Forskning om barnehager. En kunnskapsstatus (Research on kindergartens. A knowledge status). Oslo: Norges forskningsråd.

Habermas, J., 1984. *The Theory of Communicative Action*, 1. Cambridge: Polity Press.

Healey, P., 1992. A Planner's Day: Knowledge and Action in Communicative Practice. *Journal of American Planning Association* 58 (1), pp. 9–20.

Imbert, D., 2007. Landscape Architects of the World, Unite! Professional organizations, practice, and politics, 1935–1948. *Journal of Landscape Architecture*, 2 (1), pp. 6–19.

Jeffrey, B. & Woods, P., 2003. *The Creative school: a framework for success, quality and effectiveness* London: Routledge.

MCFA, 2005. *Ot.prp.nr.72 (2004–2005) Om lov om barnehager, barnehageloven (About the kindergarten act)*. Oslo: Ministry of Children and Family Affairs.

MCAA, 1977. *Barnehagen, Lekeplass og lokaler (The kindergarten, play area and premises)*. Temahefte nr. 7. Oslo: Ministry of Consumer Affairs and Administration.

MCAA, 1982. *Barnehagens uteområde (Outdoor space in kindergartens)*. Temahefte 12. Oslo: Ministry of Consumer Affairs and Administration.

MER, 2005. *Lov om barnehager (The kindergarten act)*. Oslo: Ministry of Education and Research.

MER, 2006. *Lov 17. juni 2005 nr 64 om barnehager (barnehageloven) med forskrifter og departementets merknader til bestemmelsene (Act of 17 June 2005 No. 64: The Kindergarten Act and its regulations and the Ministry's comments on the regulations)* Oslo: Ministry of Education and Research.

MER, 2009. *Kvalitet i barnehagen, white paper nr. 41 (Quality in kindergartens, white paper no. 41)*. Oslo: Ministry of Education and Research. (White paper).

NAL, 2011. In homepage http://www.arkitektur.no/etiske-regler. Last uppdated June 2. 2010.

Nilsen, A. H. & Hägerhäll, C. M., 2012. Impact of space requirements on outdoor play areas in public kindergartens. *Nordic Journal of Architectural Research*, 24 (2): pp. 8–28.

NLA, 2011. *MNLA 2011-12 Medlemshåndbok (List of members)*. Oslo: Norsk Landskapsarkitekters Forening.

Paget, S., 2008. *Aspekter på landskapsarkitektens yrkesroll – med utgångspunkt i skolgårdsutvecling (Aspects of the landscape architect's professional role – based on the school ground development)*. Uppsala: Swedish University of Agricultural Sciences, Faculty of Natural Resources and Agricultural Sciences: p. 129.

Rolfsen, E., 1960. *Oslo: planlegging og utvikling (Oslo: planning and development)*. Oslo: Agency for Planning and Building Services.

Sager, T., 2009. Planner's role: Torn between Dialogical Ideals and Neoliberal Realities. *European Planning Studies*, 17 (1): pp. 65–84.

Sandborgh, G., 1982. *Rörelse (Activities)*. Stockholm: Esselte Studium AB.

Schön, D. A., 1983. *The Reflective Practitioner: How Professional Thinks in Action*. New York: Basic Books.

Swaffield, S., 2002. Social Change and the Profession of Landscape Architecture in the Twenty-First Century. *Landscape Journal,* 21 (1), pp. 183–184.

Thorsen, D. E. & Lie, A., 2007. Kva er nyliberalisme? (What is Neoliberalism?). In: Mydske, P. K., Claes, D. H. & Lie, A. ed. *Nyliberalisme – ideer og politisk virkelighet*, pp. 33–48. Oslo: Universitetsforlaget.

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Brief account of current research

Current research includes urban development processes when implementing the ideal of the compact city as a model for sustainable development. The research focus is on planning processes between private and public planning seen in the light of democracy theories. Current research also focuses on green structure planning.